

What is claimed is:

1                   1. A method for installing software on a hardware device by an agent  
2                   which resides on the hardware device comprising:  
3                   a communication network gateway sending a message to an agent residing  
4                   on the hardware device informing the agent of a command to install software on  
5                   the hardware device on which it resides;  
6                   an agent verifying the validity of the message sent to it with the  
7                   communication network gateway;  
8                   the communication network gateway transmitting an indication regarding  
9                   the validity of the command;  
10                  the agent receiving the command to install software on the hardware device  
11                  if the indication transmitted from the gateway indicates that the command is valid;  
12                  the communication network gateway initiating a locking signal regarding  
13                  using pre-determined resources of the hardware device to execute the command to  
14                  install software on the hardware device;  
15                  the agent requesting files from a file server via the communication network  
16                  gateway required for completion of the received installation command;  
17                  the file server sending the files required for completion of the received  
18                  installation command to the agent via the communication network gateway;  
19                  the agent installing the files sent to it on the hardware device upon which it  
20                  resides in response to the received installation command; and  
21                  the communication network gateway removing the locking signal  
22                  associated with using the pre-determined resources of the hardware device to  
23                  execute the command to install software in a hardware device after the files have  
24                  been installed.

1                   2. The method of claim 1, wherein the locking signal comprises a device  
2 resource locking signal that prevents the gateway from sending a second command  
3 relating to pre-determined resources of the hardware device in use by the agent  
4 installing software.

1                   3. The system of claim 1, further comprising the communication gateway  
2 entering identification information of the hardware device and the pre-determined  
3 resources of the hardware device required to execute the command to install  
4 software on the hardware device in a table within a system database.

1                   4. The method of claim 3, wherein the table within the system database  
2 operates using uniqueness constraints for hardware device identification  
3 information contained therein.

1                   5. The method of claim 4, wherein the locking signal comprises a  
2 uniqueness constraints signal.

1                   6. The method of claim 4, wherein the table within the system database  
2 contains uniqueness constraints regarding resource identification information  
3 contained therein.

1                   7. The method of claim 6, wherein the locking signal comprises a  
2 uniqueness constraint signal.

1                   8. The method of claim 1, further comprising:  
2 the agent installing the files according to an instruction set.



1 16. The method of claim 13, wherein the step of preventing comprises  
2 locking a group of resources on the hardware device.

1 17. The method of claim 16, wherein the step of preventing comprises  
2 locking all resources on the hardware device.

1 18. The method of claim 16, wherein the step of preventing comprises  
2 preventing the execution of software commands requiring one of the group of  
3 locked resources.

1 19. The method of claim 13, wherein the step of preventing comprises  
2 locking a single resource on the hardware device.

1 20. The method of claim 19, wherein the step of preventing comprises  
2 preventing the execution of software commands requiring the single locked  
3 resource.

1 21. The method of claim 13, wherein the step of determining comprises  
2 verifying the presence of a resource identification number within a system  
3 database.

1 22. The method of claim 21, wherein each hardware device resource  
2 contained within the table of the system database is constrained by a uniqueness  
3 constraint.